

J. BUELLESBACH.
HINGE FOR SELF CLOSING GATES.
APPLICATION FILED DEC. 2, 1908.

960,268.

Patented June 7, 1910.

2 SHEETS—SHEET 1.

Fig. 1.

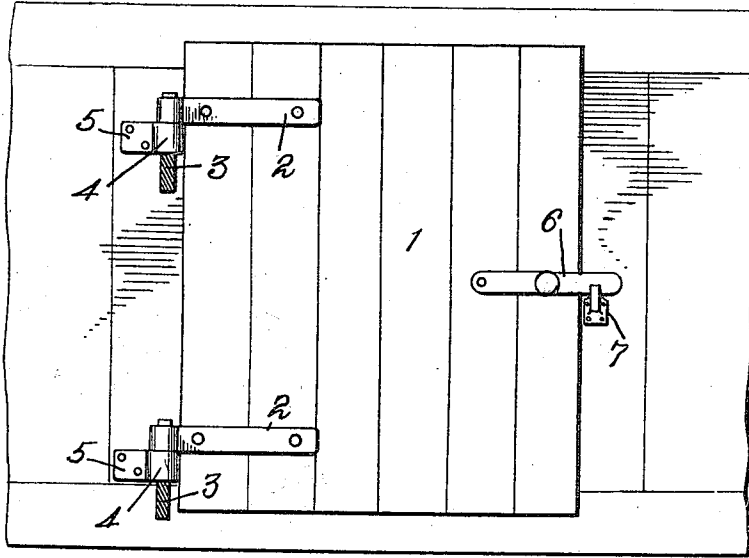


Fig. 2.

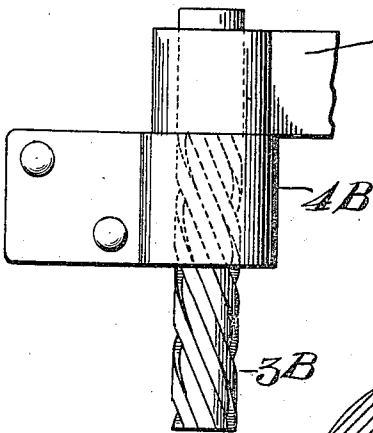


Fig. 3.

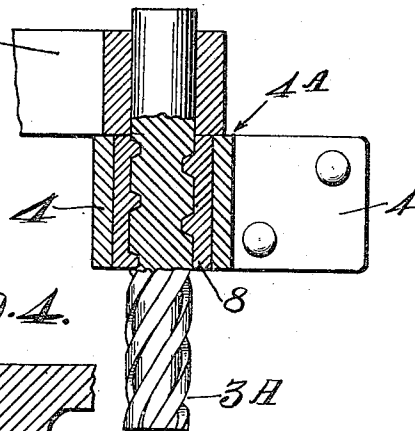
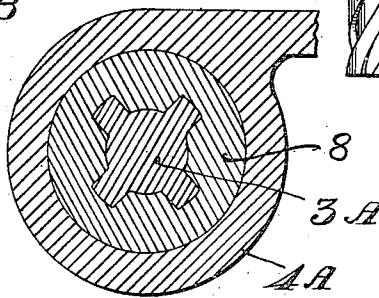


Fig. 4.



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Harry E. Hertz
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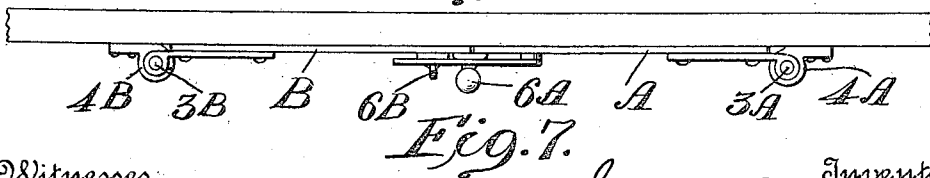
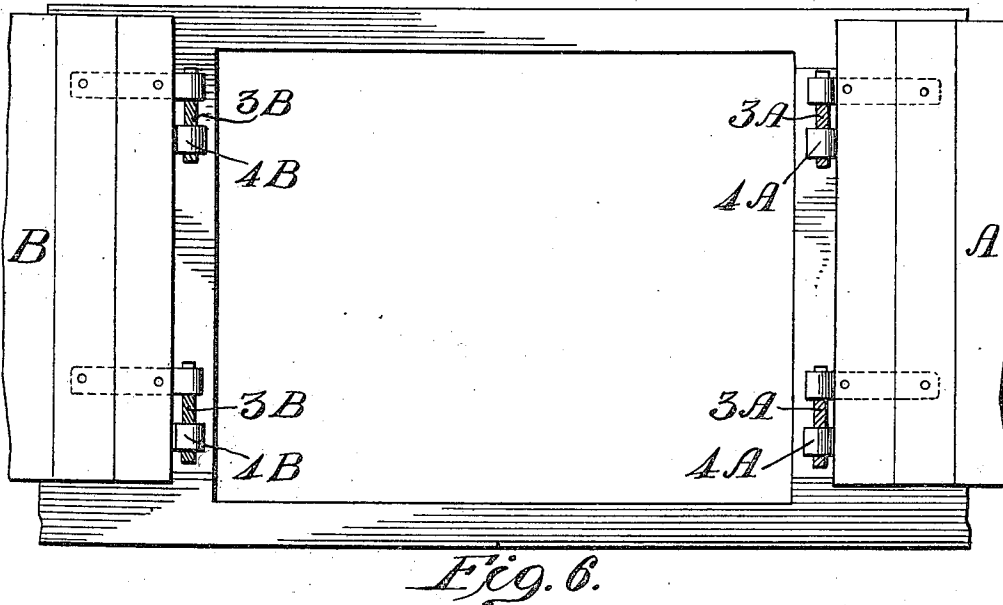
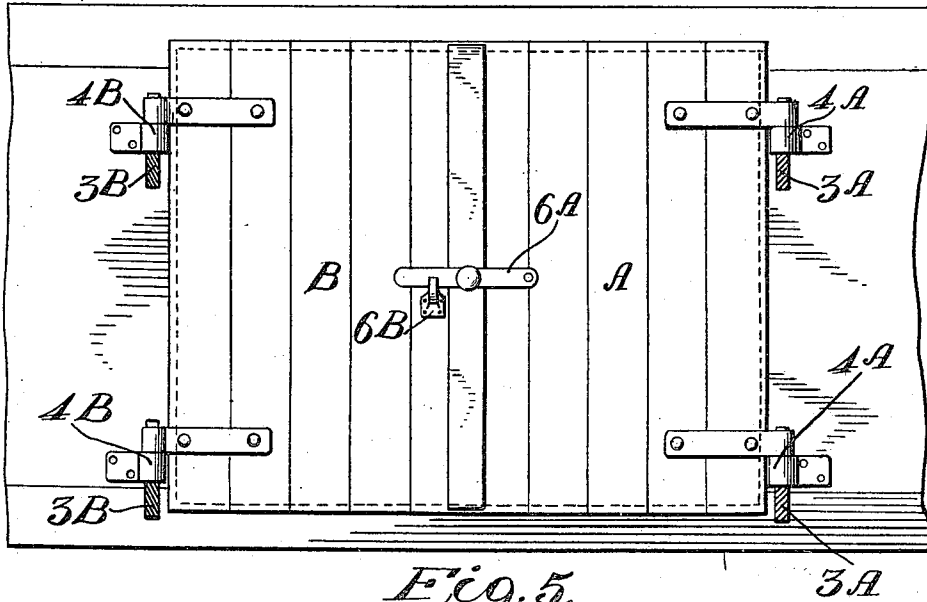
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By his Attorneys
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UNITED STATES PATENT OFFICE.

JOSEPH BUELLESBACH, OF NEW YORK, N. Y.

HINGE FOR SELF-CLOSING GATES.

960,268.

Specification of Letters Patent.

Patented June 7, 1910.

Application filed December 2, 1908. Serial No. 465,704.

To all whom it may concern:

Be it known that I, JOSEPH BUELLESBACH, a citizen of the United States, residing in the city, county, and State of New York, have invented certain new and useful Improvements in Hinges for Self-Closing Gates, of which the following is a full, clear, and exact specification.

My invention relates to improvements in the construction of gates and doors, particularly to the hinges upon which the same are supported, and has for its object to improve the construction of such hinges so that the said gates or doors may be closed automatically and quickly, and whereby, in case the invention is applied to double doors, the inner door may be caused to close first.

The invention consists in the novel construction of parts hereinafter described and fully illustrated in the accompanying drawings, wherein—

Figure 1 is a front elevation of a door construction embodying my invention. Fig. 2 is a detail elevation of an enlarged hinge showing my improved construction. Fig. 3 is a similar view, partly in section, showing a slower-acting thread than is shown in Fig. 2. Fig. 4 is a cross-section, partly broken, on the line 4—4 of Fig. 3. Fig. 5 is an elevation of a modification wherein my invention is applied to double doors. Fig. 6 is a similar view showing the doors open; and Fig. 7 is a top view of the structure illustrated in Fig. 5.

In the form illustrated in Fig. 1, the door or gate 1 is supported upon hinges, each of which comprises two leaves, a pintle leaf 2 fastened to the door, which has its pintle 3 externally threaded, and a knuckle leaf 5, having a knuckle 4, which is internally threaded to correspond with the pintle 3, which it receives. The door is retained in closed position by a swinging hasp 6, which is maintained in position to ride over the keeper 7, as the door swings to.

It will be observed that the pintle 3 and knuckle 4 constitute a quick-acting screw

connection, by means of which, as the door is unlatched and swung open, it is caused to rise, and upon being released it will be impelled to swing to its closed position by gravity. The screw thread connection of the two leaves of the hinge insures the proper positioning of the door or gate at all times and prevents the accidental or unauthorized removal of the said door or gate.

In the form illustrated in Figs. 5, 6, and 7, my invention is shown as applied to a double door or gate. In this form, as illustrated in Fig. 5, the right-hand door A bears the hasp 6^A, and the left-hand door B bears the keeper 6^B, and it is manifest that both of the doors being open, it is desirable that the left-hand door B should first swing to so that the doors may be properly locked. To accomplish this the pintles 3^B on the pintle leaf attached to the left-hand door B have a coarser thread than in the corresponding pintles 3^A on the right-hand door, and the knuckles 4^B, 4^B, are provided with threads corresponding in pitch to the pintles 3^B, 3^B. Therefore when the two doors A, B, are thrown open and subsequently released, the door B, by reason of the coarser pitch on its pintle and knuckles 3^B, 4^B, will first swing to and will be locked by the later closing of the door A bearing the hasp.

Figs. 2 and 3 are enlarged views of the differently threaded pintles and knuckles 3^A, 4^A, and 3^B, 4^B. The pintles, as shown in Fig. 3, fit tightly within the butt of the pintle leaf 2, and are there securely held against movement. The threaded knuckle through which the threaded pintle passes, may be, as shown in Fig. 3, in the form of a separate bushing 8, which is suitably held within the knuckle 4^A against rotation, and may if desired be hardened to provide against undue wear.

I have illustrated one manner of applying my invention and it is obvious that the same may be modified or reversed and inverted or other changes made without departing from the spirit thereof.

What I claim as new is:

In combination with a pair of self-closing doors, hinges, and screw thread connections between the parts of the hinges, movable
5 relatively to each other, the screw threads for the hinges of one door being of a different pitch than those for the other door, substantially as described.

In testimony whereof I have hereunto set my hand in the presence of two subscribing
witnesses.

JOSEPH BUELLESBACH.

Witnesses:

HENRY BUSHMAN,
CLAUDE C. NEVILLE.